

**INFORMATION DISCLOSURE CITATION**  
(Use several sheets if necessary)

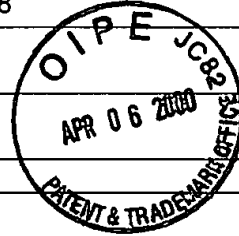
Atty. Docket No. 06502.0260-00000

Serial No. 09/441,458

Applicant Brian T. MURPHY et al.

Filing Date November 17, 1999

Group Art Unit 2756



**U.S. PATENT DOCUMENTS**

| Examiner Initial* | Document Number | Date       | Name                | Class | Sub Class | Filing Date If Appropriate |
|-------------------|-----------------|------------|---------------------|-------|-----------|----------------------------|
| NE                | US4,491,946     | 01/01/1985 | Kryskow, Jr. et al. |       |           |                            |
|                   | US4,713,806     | 12/15/1987 | Oberlander et al.   |       |           |                            |
|                   | US4,809,160     | 02/28/1989 | Mahon et al.        |       |           |                            |
|                   | US4,823,122     | 04/18/1989 | Mann et al.         |       |           |                            |
|                   | US4,939,638     | 07/03/1990 | Stephenson et al.   |       |           |                            |
|                   | US4,956,773     | 09/11/1990 | Saito et al.        |       |           |                            |
|                   | US5,088,036     | 02/11/1992 | Ellis et al.        |       |           |                            |
|                   | US5,109,486     | 04/28/1992 | Seymour             |       |           |                            |
|                   | US5,187,787 ✓   | 02/16/1993 | Skeen et al.        |       |           |                            |
|                   | US5,218,699 ✓   | 06/08/1993 | Brandle et al.      |       |           |                            |
|                   | US5,257,369 ✓   | 10/26/1993 | Skeen et al.        |       |           |                            |
|                   | US5,293,614 ✓   | 03/08/1994 | Ferguson et al.     |       |           |                            |
|                   | US5,297,283     | 03/22/1994 | Kelly et al.        |       |           |                            |
|                   | US5,311,591     | 05/10/1994 | Fischer             |       |           |                            |
|                   | US5,339,435     | 08/16/1994 | Lubkin et al.       |       |           |                            |
|                   | US5,386,568     | 01/31/1995 | Wold et al.         |       |           |                            |
|                   | US5,390,328 ✓   | 02/14/1995 | Frey et al.         |       |           |                            |
|                   | US5,423,042 ✓   | 06/06/1995 | Jalili et al.       |       |           |                            |
|                   | US5,440,744     | 08/08/1995 | Jacobson et al.     |       |           |                            |

Examiner

N. El-Hachy

Date Considered:

3/21/03

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO 1449

Patent and Trademark Office - U.S. Department of Commerce

**INFORMATION DISCLOSURE CITATION**  
(Use several sheets if necessary)

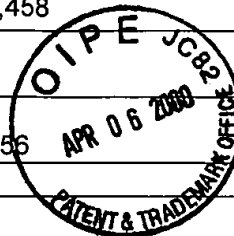
Atty. Docket No. 06502.0260-00000

Serial No. 09/441,458

Applicant Brian T. MURPHY et al.

Filing Date November 17, 1999

Group Art Unit 2756



**U.S. PATENT DOCUMENTS**

| Examiner Initial* | Document Number | Date       | Name              | Class | Sub Class | Filing Date If Appropriate |
|-------------------|-----------------|------------|-------------------|-------|-----------|----------------------------|
| NHC               | US5,448,740     | 10/01/1993 | Kiri et al.       |       |           |                            |
|                   | US5,455,952     | 10/03/1995 | Gjovaag           |       |           |                            |
|                   | US5,471,629     | 11/28/1995 | Risch             |       |           |                            |
|                   | US5,475,792     | 12/12/1995 | Stanford et al.   |       |           |                            |
|                   | US5,475,817     | 12/01/1995 | Waldo et al.      |       |           |                            |
|                   | US5,481,721     | 01/02/1996 | Serlet et al.     |       |           |                            |
|                   | US5,504,921     | 04/02/1996 | Dev et al.        |       |           |                            |
|                   | US5,511,197     | 04/03/1996 | Hill et al.       |       |           |                            |
|                   | US5,524,244     | 02/15/1994 | Robinson et al.   |       |           |                            |
|                   | US5,553,282     | 09/03/1996 | Parrish et al.    |       |           |                            |
|                   | US5,555,367     | 09/10/1999 | Premierani et al. |       |           |                            |
|                   | US5,557,798     | 09/17/1996 | Skeen et al.      |       |           |                            |
|                   | US5,560,003     | 09/24/1996 | Nilsen et al.     |       |           |                            |
|                   | US5,561,785     | 10/01/1996 | Blandy et al.     |       |           |                            |
|                   | US5,577,231 ✓   | 11/19/1996 | Scaizi et al.     |       |           |                            |
|                   | US5,603,031 ✓   | 02/11/1997 | White et al.      |       |           |                            |
|                   | US5,617,537     | 10/03/1994 | Yamada et al.     |       |           |                            |
|                   | US5,628,005     | 05/06/1997 | Hurvig            |       |           |                            |
|                   | US5,640,564     | 06/17/1997 | Hamilton et al.   |       |           |                            |
|                   | US5,652,888     | 07/29/1997 | Burgess           |       |           |                            |

Examiner

N. E/Hadley

Date Considered:

3/21/03

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

**INFORMATION DISCLOSURE CITATION**  
(Use several sheets if necessary)

Atty. Docket No. 06502.0260-00000

Serial No. 09/441,458

Applicant Brian T. MURPHY et al.

Filing Date November 17, 1999

Group Art Unit 2756

**U.S. PATENT DOCUMENTS**

| Examiner Initial* | Document Number | Date       | Name                 | Class | Sub Class | Filing Date If Appropriate |
|-------------------|-----------------|------------|----------------------|-------|-----------|----------------------------|
| <i>NE</i>         | US5,774,551     | 06/30/1998 | Wu et al.            |       |           |                            |
|                   | US5,778,228     | 07/07/1998 | Wei                  |       |           |                            |
|                   | US5,778,368     | 07/01/1998 | Hogan et al.         |       |           |                            |
|                   | US5,787,425     | 07/01/1998 | Bigus                |       |           |                            |
|                   | US5,787,431     | 07/01/1998 | Shaughnessy          |       |           |                            |
|                   | US5,809,507     | 09/15/1998 | Cavanaugh, III       |       |           |                            |
|                   | US5,813,013     | 09/22/1998 | Shakib et al.        |       |           |                            |
|                   | US5,815,149     | 09/29/1998 | Mutschler III et al. |       |           |                            |
|                   | US5,815,709     | 09/29/1998 | Waldo et al.         |       |           |                            |
|                   | US5,815,711     | 09/29/1998 | Sakamoto et al.      |       |           |                            |
|                   | US5,829,022     | 10/27/1998 | Watanabe et al.      |       |           |                            |
|                   | US5,832,529     | 11/03/1998 | Wollrath et al.      |       |           |                            |
|                   | US5,832,593     | 11/01/1998 | Malik et al.         |       |           |                            |
|                   | US5,835,737     | 11/10/1998 | Sand et al.          |       |           |                            |
|                   | US5,842,018     | 11/24/1998 | Atkinson et al.      |       |           |                            |
|                   | US5,844,553     | 03/29/1996 | Hao et al.           |       |           |                            |
|                   | US5,845,129     | 12/01/1998 | Wendorf et al.       |       |           |                            |
|                   | US5,860,004     | 01/12/1999 | Fowlow et al.        |       |           |                            |
|                   | US5,860,153     | 01/12/1999 | Matena et al.        |       |           |                            |
|                   | US5,864,862     | 01/01/1999 | Kriens et al.        |       |           |                            |

Examiner

*N. Elhady*

Date Considered:

*3/21/03*

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

**INFORMATION DISCLOSURE CITATION**  
(Use several sheets if necessary)

Atty. Docket No. 06502.0260-00000

Serial No. 09/441,458

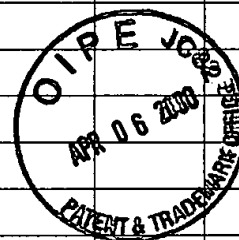
Applicant Brian T. MURPHY et al.

Filing Date November 17, 1999

Group Art Unit 2756

**U.S. PATENT DOCUMENTS**

| Examiner Initial* | Document Number | Date       | Name             | Class | Sub Class | Filing Date If Appropriate |
|-------------------|-----------------|------------|------------------|-------|-----------|----------------------------|
| NE                | US5,864,866     | 01/01/1999 | Henckel et al.   |       |           |                            |
|                   | US5,872,928     | 02/01/1999 | Lewis et al.     |       |           |                            |
|                   | US5,875,335     | 02/23/1999 | Beard            |       |           |                            |
|                   | US5,878,411     | 03/01/1999 | Borroughs et al. |       |           |                            |
|                   | US5,884,079     | 06/12/1997 | Furusawa         |       |           |                            |
|                   | US5,887,134     | 03/23/1999 | Ebrahim          |       |           |                            |
|                   | US5,890,158     | 03/30/1999 | House et al.     |       |           |                            |
|                   | US5,892,904     | 04/06/1999 | Atkinson et al.  |       |           |                            |
|                   | US5,933,497     | 08/03/1999 | Beetcher et al.  |       |           |                            |
|                   | US5,935,249     | 08/01/1999 | Stern et al.     |       |           |                            |
|                   | US5,940,827     | 08/17/1999 | Hapner et al.    |       |           |                            |
|                   | US5,946,485     | 08/31/1999 | Weeren et al.    |       |           |                            |
|                   | US5,946,694     | 08/01/1999 | Copeland et al.  |       |           |                            |
|                   | US5,966,531     | 10/12/1999 | Skeen et al.     |       |           |                            |
|                   | US6,003,763     | 12/21/1999 | Gallagher et al. |       |           |                            |



Examiner

N. ElHady

Date Considered:

3/21/03

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO 1449

Patent and Trademark Office - U.S. Department of Commerce

**INFORMATION DISCLOSURE CITATION**  
(Use several sheets if necessary)

Atty. Docket No. 06502.0260-00000

Serial No. 09/441,458

Applicant Brian T. MURPHY et al.

Filing Date November 17, 1999

Group Art Unit 2756

**FOREIGN PATENT DOCUMENTS**

| Examiner Initial* | Document Number | Date       | Country | Class | Sub Class | Translation<br>Yes or No |
|-------------------|-----------------|------------|---------|-------|-----------|--------------------------|
| NZ                | EP0 300 516 A   | 01/25/1989 | EPO     |       |           |                          |
|                   | EP0 351 536 A3  | 01/24/1990 | EPO     |       |           |                          |
|                   | EP0 384 339 A   | 02/19/1990 | EPO     |       |           |                          |
|                   | EP0 472 874 A1  | 03/04/1992 | EPO     |       |           |                          |
|                   | EP0 474 340 A   | 03/11/1992 | EPO     |       |           |                          |
|                   | EP0 555 997 A   | 08/18/1993 | EPO     |       |           |                          |
|                   | EP0 565 849 A   | 10/20/1993 | EPO     |       |           |                          |
|                   | EP0 569 195 A3  | 11/10/1993 | EPO     |       |           |                          |
|                   | EP0 625 750 A   | 11/23/1994 | EPO     |       |           |                          |
|                   | EP0 635 792 A   | 01/25/1995 | EPO     |       |           |                          |
|                   | EP0 651 328 A   | 05/03/1995 | EPO     |       |           |                          |
|                   | EP0 660 231 A   | 06/28/1995 | EPO     |       |           |                          |
|                   | EP0 697 655 A2  | 02/21/1996 | EPO     |       |           |                          |
|                   | EP0 718 761 A   | 12/19/1995 | EPO     |       |           |                          |
|                   | EP0 767 432 A2  | 09/02/1996 | EPO     |       |           |                          |
|                   | EP0 778 520 A2  | 06/11/1997 | EPO     |       |           |                          |
|                   | EP0 794 493 A2  | 09/10/1997 | EPO     |       |           |                          |
|                   | EP0 803 810 A2  | 10/29/1997 | EPO     |       |           |                          |
|                   | EP0 803 811 A   | 10/29/1997 | EPO     |       |           |                          |



Examiner

N. Elhadfy

Date Considered:

3/21/03

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO 1449

Patent and Trademark Office - U.S. Department of Commerce

**INFORMATION DISCLOSURE CITATION**  
(Use several sheets if necessary)

Atty. Docket No. 06502.0260-00000

Serial No. 09/441,458

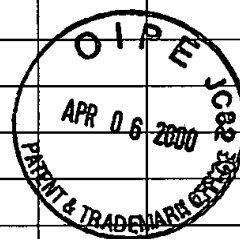
Applicant Brian T. MURPHY et al.

Filing Date November 17, 1999

Group Art Unit 2756

**FOREIGN PATENT DOCUMENTS**

| Examiner Initial* | Document Number | Date       | Country       | Class | Sub Class | Translation Yes or No |
|-------------------|-----------------|------------|---------------|-------|-----------|-----------------------|
| NE                | EP0 805 393 A2  | 11/05/1997 | EPO           |       |           |                       |
|                   | EP0 810 524 A   | 05/27/1997 | EPO           |       |           |                       |
|                   | EP0 817 020 A   | 01/07/1998 | EPO           |       |           |                       |
|                   | EP0 817 022 A2  | 01/07/1998 | EPO           |       |           |                       |
|                   | EP0 817 025 A   | 01/07/1998 | EPO           |       |           |                       |
|                   | EP0 836 140 A2  | 04/15/1998 | EPO           |       |           |                       |
|                   | GB2 253 079 A   | 08/26/1992 | Great Britain |       |           |                       |
|                   | GB2 262 825 A   | 06/30/1993 | GB            |       |           |                       |
|                   | GB2 305 087 A   | 03/26/1997 | Great Britain |       |           |                       |
|                   | JP11-45187      | 02/01/1999 | JP            |       |           |                       |
|                   | WO92/07335      | 04/30/1992 | PCT           |       |           |                       |
|                   | WO92/09948      | 06/11/1992 | PCT           |       |           |                       |
|                   | WO94/03855 A    | 02/17/1994 | PCT           |       |           |                       |
|                   | WO96/03692 A    | 02/08/1996 | PCT           |       |           |                       |
|                   | WO96/10787A     | 04/11/1996 | PCT           |       |           |                       |
| NE                | WO96/18947 A    | 06/20/1996 | PCT           |       |           |                       |
|                   | WO96/24099 A    | 08/08/1996 | PCT           |       |           |                       |
|                   | WO98/02814      | 01/22/1998 | PCT           |       |           |                       |
|                   | WO98/04971      | 02/05/1998 | PCT           |       |           |                       |



Examiner

N. El Hadj

Date Considered:

3/21/03

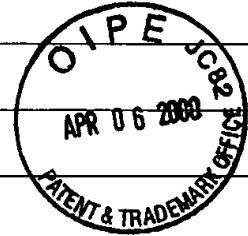
\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO 1449

Patent and Trademark Office - U.S. Department of Commerce

**INFORMATION DISCLOSURE CITATION**  
(Use several sheets if necessary)

|                                   |                       |
|-----------------------------------|-----------------------|
| Atty. Docket No. 06502.0260-00000 | Serial No. 09/441,458 |
| Applicant Brian T. MURPHY et al.  |                       |
| Filing Date November 17, 1999     | Group Art Unit 2756   |



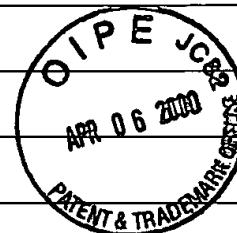
**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

|           |   |
|-----------|---|
| <i>MB</i> | "Java (TM) Remote Method Invocation Specification", Sun Microsystems, Inc., (1997),<br>java.sun.com/products/jdk1.2beta1  |
|           | "Transparent Network Computing", Locus Computing Corporation, January 5, 1995.  |
|           | Agha et al., "Actorspaces: An Open Distributed Programming Paradigm" University of Illinois, Report No. UIUCDCS-R-92-1766, Open Systems Laboratory TR No. 8, November 1992, pp. 1-12.     |
|           | Ahmed et al., "A Program Building Tool for Parallel Applications", Yale University, December 1, 1993, pp. 1-23.   |
|           | Alexander, et al., "Active Bridging", Proceedings of the ACM/SIGCOMM'97 Conference, Cannes, France, 9/97"   |
|           | Anderson et al., "Persistent Linda: Linda + Transactions + Query Processing", Proceedings of the 13th Symposium on Fault Tolerant Systems, 1991, pp. 93-109.                              |
|           | Anonymous: "Change-Notification Service for Shared Files" IBM Technical Disclosure Bulletin, vol. 36, no. 8, pages 77-82, XP002108713 New York, US  |
|           | Anonymous: "Resource Preemption for Priority Scheduling." November 1973. IBM TECHNICAL DISCLOSURE BULLETIN, vol. 16, no. 6, page 1931 XP002109435 New York, US                            |
|           | Beech et al., "Object Databases as Generalizations of Relational Databases," Computer Standards & Interfaces, Vol. 13, Nos. 1/3, pp. 221-230, (January 1991) Amsterdam, NL.               |
|           | Bertino et al., "Object-Oriented Database Management Systems: Concepts and Issues," Computer, Vol. 24, No. 4, pp. 33-47, (April 1991), Los Alamitos, CA                                   |
|           | Betz, Mark; "Interoperable objects: laying the foundation for distributed object computing"; Dr. Dobb's Journal, vol. 19, no. 11, page 18(13); (October 1994)                             |
|           | Bevan, D.I., "An Efficient Reference Counting Solution To The Distributed Garbage Collection Problem", Parall Computing, NL, Elsevier Publishers, Amsterdam, vol. 9, no. 2, pages 179-192 |
|           | Birrell et al., "Distributed Garbage Collection for Network Objects", Digital Systems Research Center, No. 116, pages 1-18, December 15, 1993.  |
|           | Birrell et al., "Grapevine: An Exercise in Distributed Computing", Communications of the ACM, Vol. 25, No. 4, April 1982, pp. 260-274.  |
|           | Birrell et al., "Implementing Remote Procedure Calls", ACM Transactions on Computer Systems, Vol. 2, No. 1, February 1984, pp. 39-59.   |
| <i>MB</i> | Birrell et al., "Network Objects", DEC SRC Research Report 115, February 28, 1994.  |

|   |   |
|---|---|
| Examiner <i>M. Eftady</i>   | Date Considered: <i>3/21/03</i>                           |
| *Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. |   |
| Form PTO 1449   | Patent and Trademark Office - U.S. Department of Commerce |

**INFORMATION DISCLOSURE CITATION**  
(Use several sheets if necessary)

|                                   |                       |
|-----------------------------------|-----------------------|
| Atty. Docket No. 06502.0260-00000 | Serial No. 09/441,458 |
| Applicant Brian T. MURPHY et al.  |                       |
| Filing Date November 17, 1999     | Group Art Unit 2756   |



**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

|  |  |
|--|--|
| <p><i>Not Considered</i></p> <p><i>No Copy Attached</i></p> <p><i>NE</i></p>   | Birrell, Andrew, et al., "Network Objects," Operating Systems Review, 27(5), December 1993, pp. 217-230.   |
|  | Cannon et al., "Adding Fault-Tolerant Transaction Processing to LINDA", Software-Practice and Experience, Vol. 24(5), May 1994, pp. 449-466.   |
|  | Cardelli, "Obliq, A lightweight language for network objects", Digital SRC, November 5, 1993, pp. 1-37.  |
|  | Carriero et al., "Distributed Data Structures in Linda", Principles of Programming Language, 1986, pp. 1-16.   |
|  | Carriero et al., "Distributed Data Structures in Linda", Yale Research Report YALEU/DCS/RR-438, November 1985.   |
|  | Chung, et al., "A 'Tiny' Pascal Compiler: Part 1: The P-Code Interpreter," BYTE Publications, Inc., September 1978.  |
|  | Chung, et al., "A 'Tiny' Pascal Compiler: Part 2: The P-Compiler," BYTE Publications, Inc., October 1978.  |
|  | Coulouris et al., "Distributed Systems Concepts and Designs", Second Edition, Addison-Wesley, 1994.  |
|  | DAVE A et al: "PROXIES, APPLICATION INTERFACE, AND DISTRIBUTED SYSTEMS", PROCEEDINGS INTERNATIONAL WORKSHOP ON OBJECT ORIENTATION IN OPERATING SYSTEMS, 24 September 1992, pages 212-220 |
|  | DEUX O et al: "The 02 SYSTEM" COMMUNICATIONS OF THE ASSOCIATION FOR COMPUTING MACHINERY, vol. 34, no. 10, 1 October 1991, pages 34-48.   |
|  | Dijkstra, "Self-stabilizing Systems in Spite of Distributed Control", Communications of the ACM, Vol. 17, No. 11, November 1974, pp. 643-644.  |
|  | Dolev et al., "On the Minimal Synchronism Needed for Distributed Consensus", Journal of the ACM, Vol. 34, No. 1, January 1987, pp. 77-97.  |
|  | Dourish, "A Divergence-Based Model of Synchrony and Distribution in Collaborative Systems", Xerox Technical Report EPC-1194-102, 1994, pp. 1-10.   |
| Drexler, K. Eric, et al., "Incentive Engineering for Computational Resource Management," The Ecology of Computation, Elsevier Science Publishers B.V., 1988, pp. 231-66. |  |
| Droms, R., "RFC 1541 Dynamic Host Configuration Protocol", HTTP://WWW.CIS.OHIO-STATE.EDU/HTBIN/RFC/RFC1541.HTML, October 1993, pages 1-33                                |  |

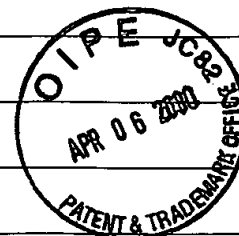
|                           |                                 |
|---------------------------|---------------------------------|
| Examiner <i>N. ElHadj</i> | Date Considered: <i>3/21/03</i> |
|---------------------------|---------------------------------|

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



**INFORMATION DISCLOSURE CITATION**  
(Use several sheets if necessary)

|                                   |                       |
|-----------------------------------|-----------------------|
| Atty. Docket No. 06502.0260-00000 | Serial No. 09/441,458 |
| Applicant Brian T. MURPHY et al.  |                       |
| Filing Date November 17, 1999     | Group Art Unit 2756   |



**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

|  |  |
|--|--|
| <p><i>NE</i></p> <p><i>Not Considered</i></p> <p><i>NE</i></p> | EMMS J: "A DEFINITION OF AN ACCESS CONTROL SYSTEMS LANGUAGE" COMPUTER STANDARDS AND INTERFACES, vol. 6, no. 4, 1 January 1987, pp. 443-454   |
|  | Gelernter et al., "Parallel Programming in Linda", Yale University, January 1985, pp. 1-21.  |
|  | Gelernter, "Generative Communication in Linda", ACM Transactions on Programming Languages and Systems, vol. 7, no. 1, January 1985, pp. 80-112.  |
|  | Gosling et al., "The Java (TM) Language Specification", Addison-Wesley, 1996.  |
|  | Gottlob et al., "Extending Object-Oriented Systems with Roles," ACM Transactions on information systems, Vol. 14, No. 3, pp. 268-296 (July 1996)   |
|  | Gray, Cary G., et al., "Leases: An Efficient Fault-Tolerant Mechanism for Distributed File Cache Consistency," ACM, 1989, pp. 202-210.   |
|  | Guth, Rob: "JavaOne: Sun to Expand Java Distributed Computing Effort", "HTTP://WWW.SUNWORLD.COM/SWOL-02-1998/SWOL-02-SUNSPOTS.HTML," XP-002109935, P.1, 1998   |
|  | Hamilton et al., "Subcontract: a flexible base for distributed programming"; Proceedings of 14th Symposium of Operating System Principles; (December 1993)   |
|  | Hamilton, Marc A., "Java and the Shift to Net-Centric Computing." Computer, August 1996, pp. 31-39.  |
|  | Harris et al., "Proposal for a General Java Proxy Class for Distributed Systems and Other Uses", Netscape Communications Corp., June 25, 1997.   |
|  | Hartman, J., Manber, U., et al., Liquid Software: A new paradigm for networked systems, Technical Report 96-11, Department of Comp. Sci., Univ. of Arizona, 6/96   |
|  | Howard et al., "Scale and Performance in a Distributed File System", ACM Transactions on Computer Systems, Vol. 6, No. 1, February 1988, pp. 51-81.  |
|  | Hunt, N., "IDF: A Graphical Data Flow Programming Language for Image Processing and Computer Vision", Proceedings of the International Conference on Systems, Man, and Cybernetics, Los Angeles, Nov. 4-7, pp. 351-360, (1990) |
|  | IBM (TM) Technical Disclosure Bulletin, "Object Location Algorithm," Vol. 36, No. 09B, pp. 257-258, September 1993.  |

IBM (TM) Technical Disclosure Bulletin, "Retrieval of Qualified Variables Using Extendible Hashing," Vol. 36, No. 12, pp. 301-303, December 1993.

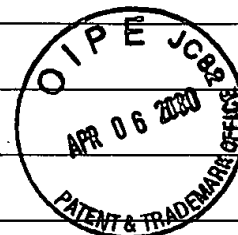
IBM: "Chapter 6 - Distributed SOM (DSOM)" SOMOBJECTS DEVELOPER TOOLKIT USERS GUIDE, VERSION 2.1, October 1994 (1994-10), pages 6-1-6-90.

|                              |                                 |
|------------------------------|---------------------------------|
| Examiner <i>N. E. Hadley</i> | Date Considered: <i>3/21/03</i> |
|------------------------------|---------------------------------|

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

**INFORMATION DISCLOSURE CITATION**  
(Use several sheets if necessary)

|                                   |                       |
|-----------------------------------|-----------------------|
| Atty. Docket No. 06502.0260-00000 | Serial No. 09/441,458 |
| Applicant Brian T. MURPHY et al.  |                       |
| Filing Date November 17, 1999     | Group Art Unit 2756   |



**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

|           |   |
|-----------|---|
| <i>NZ</i> | Jaworski, "Java 1.1 Developer's Guide, 2nd Edition", Sams.net, 1997.  |
|           | Jones, Richard, et al., "Garbage Collection: Algorithms for Automatic Dynamic Memory Management," pages 165-175, John Wiley & Sons, 1996.   |
|           | Kambhatla et al., "Recovery with Limited Replay: Fault-Tolerant Processes in Linda", Oregon Graduate Institute, Technical Report CSIE 90-019, September 1990, pp. 1-16.                         |
|           | Kay, Michael H. et al., "An Overview of the Raleigh Object-Oriented Database System", ICL Technical Journal, Vol. 7, No. 4, pp. 780-798, (November 1991), Oxford, GB.                           |
|           | Kougiouris et al.; "Support for Space Efficient Object Invocation in Spring"; (September 1994)  |
|           | Krasner, "The Smalltalk-80 Virtual Machine", BYTE Publications Inc., August 1991, pp. 300-320.  |
|           | Lamport et al., "The Byzantine Generals Problem", ACM Transactions on Programming Languages and Systems, Vol. 4, No. 3, July 1982, pp. 382-401.   |
|           | LINDA Database Search, 7/20/95, pp. 1-68.   |
|           | Lindholm et al., "The Java (TM) Virtual Machine Specification", Addison Wesley, 1996  |
|           | Liskov et al., "Distributed Object Management in Thor", International Workshop on Distributed Object Management, 1992, pp. 12.  |
|           | McDaniel, Gene, "An Analysis of a Mesa Instruction Set," Xerox Corporation, May 1982.   |
|           | Mitchell et al., "Mesa Language Manual", Xerox Corporation.   |
|           | Mitchell et al.; "An Overview of the Spring System"; (February 1994)  |
|           | Mullender, "Distributed Systems", Second Edition, Addison-Wesley, 1993.   |
|           | Mummert et al., "Long Term Distributed File Reference Tracing: Implementation and Experience", Carnegie Mellon University School of Computer Science, November 1994, pp. 1-28.                  |
|           | Orfali R. et al., "The Essential Distributed Objects Survival Guide," Chapter 11: Corba Commercial ORBs, pages 203-215, John Wiley & Sons, Inc., (1996).  |
|           | Ousterhout et al., "The Sprite Network Operating System", Computer, IEEE, February 1988, pp. 23-36.   |
| <i>NZ</i> | Pier, Kenneth A., "A Retrospective on the Dorando, A High-Performance Personal Computer," IEEE Conference Proceedings, The 10th Annual International Symposium on Computer Architecture," 1983. |

|                           |                                 |
|---------------------------|---------------------------------|
| Examiner <i>N. S/Hady</i> | Date Considered: <i>3/21/03</i> |
|---------------------------|---------------------------------|

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

**INFORMATION DISCLOSURE CITATION**  
(Use several sheets if necessary)

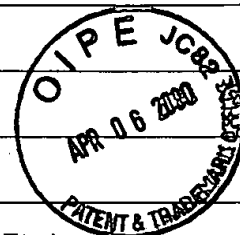
Atty. Docket No. 06502.0260-00000

Serial No. 09/441,458

Applicant Brian T. MURPHY et al.

Filing Date November 17, 1999

Group Art Unit 2756



**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

|  |  |
|--|--|
|  | Pier, Kenneth A., "A Retrospective on the Dorando, A High-Performance Personal Computer," Xerox Corporation, Aug. 1983.  |
|  | Pinakis, "Using Linda as the Basis of an Operating System Microkernel", University of Western Australia, Department of Computer Science, August 1993, pp. 1-165.   |
|  | Riggs Roger et al., "Pickling State in the Java (TM) System," USENIX Association Conference on Object-Oriented Technologies and Systems, XP-002112719, June 17-21, 1996, pp. 241-250.                                      |
|  | Rosenberry et al., "Understanding DCE"; Chapters 1-3, 6; (1992)  |
|  | Sharrott et al., "ObjectMap: Integrating High Performance Resources into a Distributed Object-oriented Environment," ICODP, 1995.  |
|  | Thompson, Ken, "Regular Expression Search Algorithm," Communications of the ACM, Volume II, Number 6, p. 149 et seq., June 1968.   |
|  | Venners, B., "Jini Technology, Out of the Box", JAVAWORLD, 'Online!', pp 1-4, December 1998.   |
|  | Waldo J et al: "Events in an RPC based distributed system" PROCEEDINGS OF THE 1995 USENIX TECHNICAL CONFERENCE, PROCEEDINGS USENIX WINTER 1995 TECHNICAL CONFERENCE, NEW ORLEANS, LA. USA, 16-20 JAN. 1995, pages 131-142. |
|  | Wilson, P.R., et al., "Design of the Opportunistic Garbage Collector," Proceedings of the Object Oriented Programming Systems Languages And Applications Conference, New Orleans, Vol. 24, No. 10, October 1989.           |
|  | Wollrath et al., "A Distributed Object Model for the Java (TM) System", USENIX Association, Conference on Object-Oriented Technologies and Systems, June 17-21, 1996.  |
|  | Wu, Xuequn, "A Type system for an Object-Oriented Database System," Proceedings of the International Computer Software and Applications Conference (COMPSAC), pp. 333-338, Sept. 11-13, 1991, Tokyo, JAPAN.                |
|  | Yemini, Y. and S. da Silva, "Towards Programmable Networks", IFIP/IEEE International Workshop on Distributed Systems: Operations and Management, L'Aquila, Italy, 10/96  |
|  | Yin J. et al., "Using Leases to Support Server Driven Consistency in Large-Scale Systems", Computer Services Department, University of Texas at Austin, p. 285-294   |

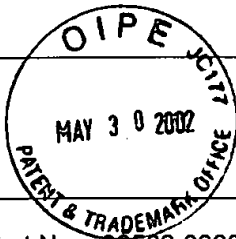
Examiner

Date Considered:

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO 1449

Patent and Trademark Office - U.S. Department of Commerce



OMB N . 0651-0011

**INFORMATION DISCLOSURE CITATION**  
(Use several sheets if necessary)

Atty. Docket No.: 06502.0260-00000

Serial No.: 441,458/09

Applicant: Brian T. Murphy et al.

Filing Date: November 17, 1999

Group 2756

**U.S. PATENT DOCUMENTS**

| Examiner Initial* | Document Number | Date       | Name             | Class | Sub Class | Filing Date If Appropriate |
|-------------------|-----------------|------------|------------------|-------|-----------|----------------------------|
| NE                | US6,016,516     | 1/18/2000  | Horikiri         |       |           |                            |
| NE                | US6,032,151     | 2/29/2000  | Arnold et al.    |       |           |                            |
| NE                | US6,044,381     | 3/28/2000  | Boothby et al.   |       |           |                            |
| NE                | US6,134,603     | 10/17/2000 | Jones et al.     |       |           |                            |
| NE                | US6,182,083 B1  | 1/30/2001  | Scheifler et al. |       |           |                            |
| NE                | US6,339,783 B1  | 1/15/2002  | Horikiri         |       |           |                            |

RECEIVED

MAY 31 2002

Technology Center 2100

**FOREIGN PATENT DOCUMENTS**

| Examiner Initial* | Document Number | Date | Country | Class | Sub Class | Translation Yes or No |
|-------------------|-----------------|------|---------|-------|-----------|-----------------------|
|                   |                 |      |         |       |           |                       |

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

|    |   |
|----|---|
| NE | "Eden Project Proposal," Department of Computer Science, University of Washington, Oct. 1980, Technical Report #80-10-01, cover and Foreword.                                     |
| NE | Almes et al., "Edmas: A Locally Distributed Mail System," Department of Computer Science, University of Washington, Technical Report 83-07-01, July 7, 1983, Abstract & pp. 1-17. |
| NE | Almes et al., "Research in Integrated Distributed Computing," Department of Computer Science, University of Washington, Oct. 1979, pp. 1-42.                                      |
| NE | Almes et al., "The Eden System: A Technical Review," Department of Computer Science, University of Washington, Technical Report 83-10-05, Oct. 1983, pp. 1-25.                    |

Examiner

N. El Hadj

Date Considered:

3/20/03

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Form PTO 1449

Patent and Trademark Office - U.S. Department of Commerce



OMB No. 0651-0011

**INFORMATION DISCLOSURE CITATION**  
(Use several sheets if necessary)

Atty. Docket No.: 06502.0260-00000

Serial No.: 441,458/09

**RECEIVED**

Applicant: Brian T. Murphy et al.

**MAY 31 2002**

Filing Date: November 17, 1999

Group 2756

Technology Center 2100

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

|           |   |
|-----------|---|
| <i>NE</i> | Almes, "Integration and Distribution in the Eden System," Department of Computer Science, University of Washington, Technical Report 83-01-02, Jan. 19, 1983, pp. 1-18 & Abstract.                      |
|           | Almes, "The Evolution of the Eden Invocation Mechanism," Department of Computer Science, University of Washington, Technical Report 83-01-03, Jan. 19, 1983, pp. 1-14 & Abstract.                       |
|           | Arnold, Ken, "The Jini Architecture: Dynamic Services in a Flexible Network," Sun Microsystems, Inc., Proceedings of the 36th ACM IEEE Design Automation Conference, June 1999, pages 157-162.          |
|           | Begole et al., "Transparent Sharing of Java Applets: A Replicated Approach," 10/1997, pp. 55-65.  |
|           | Black et al., "A Language for Distributed Programming," Department of Computer Science, University of Washington, Technical Report 86-02-03, Feb. 1986, p. 10.  |
|           | Black et al., "Distribution and Abstract Types in Emerald," University of Washington, Technical Report No. 85-08-05, August 1985, pp. 1-10.   |
|           | Black et al., "Object Structure in the Emerald System," University of Washington, Technical Report 86-04-03, April 1986, pp. 1-14.  |
|           | Black et al., "The Eden Project: A Final Report," Department of Computer Science, University of Washington, Technical Report 86-11-01, Nov. 1986, pp. 1-28.   |
|           | Black, "Supporting Distributed Applications: Experience with Eden," Department of Computer Science, University of Washington, Technical Report 85-03-02, March 1985, pp. 1-21.                          |
|           | Black, "The Eden Programming Language," Department of Computer Science, FR-35, University of Washington, Technical Report 85-09-01, Sept. 1985 (Revised Dec. 1985), pp. 1-19.                           |
|           | Black, "The Eden Project: Overview and Experiences," Department of Computer Science, University of Washington, EUUG, Autumn '86 Conference Proceedings, Manchester, UK, Sept. 22-25, 1986, pp. 177-189. |
|           | Braine et al., "Object-Flow," 1997, pp. 418-419   |
|           | Ciancarini et al., "Coordinating Distributed Applets with Shade/Java," 2/1998, pp. 130-138.   |
|           | Delcambre et al., "Simulation of the Object Flow Model: A Conceptual Modeling Language for Object-Driven Applications," 1993, pp. 216-225.  |
|           | Goldberg et al., "Smalltalk-80 - The Language and its Implementation," Xerox Palo Alto Research Center, 1983 (reprinted with corrections, July 1985), pp. 1-720.  |
| <i>NE</i> | Holman et al., "The Eden Shared Calendar System," Department of Computer Science, FR-35, University of Washington, Technical Report 85-05-02, June 22, 1985, pp. 1-14.                                  |

Examiner

*N. S. Hadley*

Date Considered:

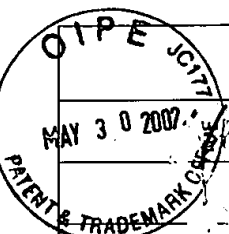
*3/20/03*

\*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

**INFORMATION DISCLOSURE CITATION**  
(Use several sheets if necessary)

|                                    |                        |  |
|------------------------------------|------------------------|--|
| Atty. Docket No.: 06502.0260-00000 | Serial No.: 441,458/09 | <b>RECEIVED</b><br><b>MAY 31 2002</b><br><b>Technology Center 2100</b> |
| Applicant: Brian T. Murphy et al.  |                        |  |
| Filing Date: November 17, 1999     | Group 2756             |  |

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

|  |  |
|--|--|
|    | Hsu, "Reimplementing Remote Procedure Calls," University of Washington, Thesis, March 22, 1985, pp. 1-106.   |
|  | Hutchinson, "Emerald: An Object-Based Language for Distributed Programming," a Dissertation, University of Washington, 1987, pp. 1-107.  |
|  | Jacob, "The Use of Distributed Objects and Dynamic Interfaces in a Wide-Area Transaction Environment," SIGCOMM '95 Workshop on Middleware: Cambridge, Mass., Aug. 1995, pp. 1-3.   |
|  | Jul et al., "Fine-Grained Mobility in the Emerald System," University of Washington, ACM Transactions on Computer Systems, Vol. 6, No. 1, Feb. 1988, pp. 109-133.  |
|  | Jul, "Object Mobility in a Distributed Object-Oriented System," a Dissertation, University of Washington, 1989, pp. 1-154 (1 page Vita).   |
|  | Koshizuka et al., "Window Real-Objects: A Distributed Shared Memory for Distributed Implementation of GUI Applications," 11/1993, pp. 237-247.   |
|  | Krasner et al., "Smalltalk-80: Bits of History, Words of Advice," 1983, Xerox Corporation, pp. 1-344.  |
|  | Lavana et al., "Executable Workflows: A Paradigm for Collaborative Design on the Internet," 6/1997, 6 pages.   |
|  | Proceedings of the Eighth Symposium on Operating Systems Principles, December 14-16, 1981, ACM, Special Interest Group on Operating Systems, Association for Computing Machinery, Vol. 15, No. 5, Dec. 1981, ACM Order No. 534810. |
|  | Proudfoot, "Repects: Data Replication in the Eden System," Department of Computer Science, University of Washington, Technical Report No. TR-85-12-04, Dec. 1985, pp. 1-156.   |
| Pu, "Replication and Nested Transaction in the Eden Distributed System," Doctoral Dissertation, University of Washington, August 6, 1986, pp. 1-179 (1 page Vita). |  |
| Trehan et al., "Toolkit for Shared Hypermedia on a Distributed Object Oriented Architecture," 1993, pp. 1-8.   |  |

|  |                    |   |                |
|--|--------------------|---|----------------|
| Examiner   | <i>N. S/Hadley</i> | Date Considered:  | <i>3/20/03</i> |
| <p>*Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p> |                    |   |                |
| Form PTO 1449  |                    | Patent and Trademark Office - U.S. Department of Commerce |                |



Creation date: 06-24-2004  
Indexing Officer: TLEGESSE - TSEGAYE LEGESSE  
Team: OIPEBackFileIndexing  
Dossier: 09441458

Legal Date: 02-23-2004

| No. | Docode | Number of pages |
|-----|--------|-----------------|
| 1   | XT/    | 1               |

Total number of pages: 1

Remarks:

Order of re-scan issued on .....